



CITY OF DURHAM | DURHAM COUNTY
NORTH CAROLINA



Zoning Map Change Report

This request was submitted prior to the adoption of text amendments for development plans, TC07-10, in March of 2009. As such, the development plan associated with this request is subject to the previous provisions of the Unified Development Ordinance (see Attachment 12) with the exception of Sec. 3.5.12, Deviations from Approved Development Plans.

Meeting Date: June 23, 2010

Reference Name	751 Assemblage (Z0800003)	Jurisdiction	County
Request	Proposed Zoning	Mixed Use with a development plan (MU(D)), Residential Rural with a development plan (RR(D))	
	Existing Zoning	Planned Development Residential 0.220 (PDR 0.220), RR	
	Proposed Use	Commercial, office, residential, civic	
	Existing Use	Vacant	
Site Characteristics	Development Tier	Suburban (147.4 acres), Rural (19.43 acres)	
	Land Use Designation	Very Low Density Residential (2 DU/Ac or less), Rural Density Residential (0.5 DU/Ac or less)	
	Overlays	F/J-B (partial), F/J-A (partial)	
	River Basin	Cape Fear	
	Drainage Basin	Jordan Lake	
	Site Acreage	166.8 acres	
Applicant	Southern Durham Development, Inc.	Submittal Date	January 14, 2008
Location	9414 NC 751 Highway, on the west side of NC 751 Highway, south of Chancellor's Ridge Drive and opposite Fayetteville Road		
PINs	0717-03-34-0901, -44-0374, -2004, -3385, -04-32-9923, -52-4401		
Recommendations/ Comments	Staff	Approval, based on consistency with the <i>Comprehensive Plan</i> and considering the information contained in this report.	

Recommendations/ Comments	Planning Commission	Denial, 11-1 on April 13, 2010. The Planning Commission finds that the ordinance request is not consistent with the adopted <i>Comprehensive Plan</i> . The Commission believes the request is not reasonable nor in the public interest and recommends denial based on inadequate transportation infrastructure, inconsistency with neighboring land uses, concerns regarding impacts on the environment, and opposition from the community.
	DOST	See attached memo
	BPAC	See attached memo

A. Summary

This is a request to change the zoning designation of a 166.8-acre site at 9414 NC 751 Highway. The proposed development plan, if approved, would allow for a range of 1,040 to 1,300 residential units (a mix of single- and multi-family) as well as a combination of commercial, office, and civic uses; ranging from 170,000 to 750,000 square feet of total non-residential uses.

The RR portion of this request is consistent with the *Comprehensive Plan*, which designates the portions of the site outside of the UGA as Rural Density Residential (0.5 du or less). The proposed density of 8.9 DU/Ac on the MU(D) portion of this request is higher than the 2 DU/Ac or less recommended by the future land use map. However, the request is consistent with *Comprehensive Plan* Policy 2.3.2e, Suburban Tier Mixed Use, because residential land use is shown on the Future Land Use Map, and the proposed MU(D) district includes a residential component.

A development plan has been submitted with this request and shows a conceptual layout of the property and a number of committed elements. If this plan were approved, any significant deviation from the committed elements within the plan would require a new zoning petition for the property. The development plan submitted with this request includes the following committed elements (*with commitments proffered at, or since, the Planning Commission hearing shown in italics*):

Development Plan Committed Elements
<ol style="list-style-type: none"> 1. Maximum number of residential units is 1,300. 2. Maximum office floor area is 300,000 square feet. 3. Maximum commercial floor area is 300,000 square feet. 4. Widening of NC Hwy 751 along the site frontage to a four-lane divided cross section with bike lanes, to include curb and gutter for frontage of the site along NC 751. 5. Donation of property to the Durham Public Schools (DPS), subject to acceptance by DPS, of approximately 10.5 acres for use as an elementary school, or a donation of approximately 22.5 acres of an elementary/middle school campus, with such property being located within Element J on sheet DP-2.1 of this development plan. And with

- such donation to occur within 90 days after the effective date of annexation by the City of Durham of the project in accordance with Z0800003.
6. Donation of property, labeled as Element K on sheet DP-2.1 of this development plan, to Parkwood Volunteer Fire Department, Inc. (“PVFD”) (or the Durham Fire Department) for an *fire station and/or an emergency medical services facility*, subject to acceptance by PVFD (or the Durham Fire Department), with such donation to occur *prior to the issuance of the first certificate of occupancy*.
 7. Donation of a 20-year lease for up to 1,500 square feet of space to the Durham County Sheriff’s Department (or Durham Police Department) for use as a Sheriff’s Department (or Police) substation to provide administrative facilities for Sherriff’s Deputies (or Durham Police) subject to acceptance by the Durham County Sherriff (or Durham Police Department), with such substation to be located within a mutually-agreed upon space within Element A, B, C, E, F, or G. Such donation and acceptance shall occur within 90 days after the submittal of the site plan for the phase within which the Sherriff’s Department Substation shall be located. In the event that the Sheriff’s Department (or Police Department) determines that it no longer requires the administrative facilities provided by the substation prior to the expiration of the lease, the substation space shall revert to the building owner.
 8. Dedication of right-of-way for the frontage of the site to provide a minimum of 55 feet from the centerline of NC 751 and 10 feet from back of curb, prior to issuance of the first building permit.
 9. This mixed use development will have at least one structure containing vertical integration of residential and non-residential uses pursuant to UDO Sec. 6.11.7.D.2.A, so that residential density up to 10.5 units per acre in the MU district within the development would be permitted based on UDO section 6.3 and such density may be calculated upon the entire site acreage, including areas typically precluded from consideration for density in UDO Article 8, Environmental Protection. Notwithstanding the number of residential units permitted pursuant to UDO Sec. 6.11.7.D.2, the total number of residential units shall be capped at 1,300, as stated in committed element 1 above.
 10. A minimum of one pedestrian trail access will stub to the adjacent US Army Corps of Engineers (USACOE) property. The trail will connect to the existing Eagle Spur Trail if permitted by the USACOE. The trail stub and, if permitted by the USACOE, the connection to the Eagle Spur will be completed prior to the issuance of the first certificate of occupancy for “The Hollows Phase”. *The trail stub connection to the Eagle Spur trail will be built or dedicated to the Army Corps property line if the trail cannot be built on Army Corps property.*
 11. The area identified as “committed bottomlands *offset area*” and “*committed bottomlands offset tree save deed restriction on single family lot*” (offset from the 100-year floodway fringe), as identified on sheet DP-2.0, shall be undisturbed.
 12. *The area identified as “committed bottomlands offset revegetation area” as identified on sheet DP-2.0 shall be revegetated according to the “Wildlife-Friendly Landscaping: Use only Native Plants” guidelines in the NC Wildlife Resources Commission’s Green Growth Toolbox and the “School Site Bottomlands Offset Revegetation Planting Specification” detail on sheet DP-2.0. NCDENR shall be invited to review the revegetation plan. This revegetation shall occur prior to the issuance of the first certificate of occupancy for the school site. No field adjustments to be made without*

City-County Planning Department approval.

- 13. A minimum of 25.58% tree coverage will be provided for the 166.83 acre site.*
- 14. The project will provide a 10-foot wide paved trail/walkway route, excluding street or driveway crossings, that will connect the northern and southern property boundaries of the site to facilitate off-road walking, jogging, biking within the site.*
- 15. The project will provide a sidewalk on at least one side of all streets.*
- 16. There will be no fence around the perimeter of the project except as shown on sheet DP-2.0 adjacent to the proposed school site and labeled "committed bottomlands offset fence limits". The fence shall be installed prior to issuance of the first certificate of occupancy for the school site and shall be vinyl coated chain link.*
- 17. Street crossings of the two natural drainage corridors between elements "F" and "G" and element "I" shall be constructed in a manner that provide underpasses that are suitable for various small and medium size wildlife species to cross under the roadway on a ground surface that is either natural or suitable for wildlife to traverse even during rainfall events.*
- 18. The internal trail network will connect to the Colvard Farms property line*

SUMMARY OF REQUIRED TIA IMPROVEMENTS

General

1. Upgrade existing signal heads and timing plans to accommodate the recommended improvements at all signalized intersections.
2. Provide a signal warrant analysis and install a traffic signal (or roundabout) if warranted and approved by NCDOT prior to full build-out for the following intersections:
 - a. NC 751 and Massey Chapel Road;
 - b. Stagecoach Road and Farrington Road;
 - c. NC 751 and Student Place/Site Access #2;
 - d. NC 751 and Site Access #3;
 - e. NC 751 and O'Kelly Chapel Road;
 - f. Fayetteville Road and Massey Chapel Road (North);
 - g. Massey Chapel Road/Barbee Road and Herndon Road.
3. Widen NC 751 to a four-lane divided cross-section from south of Site Access #5 to north of Stagecoach Road to provide two through lanes with outside bike lanes in each direction.
4. Reduce the speed limit on NC 751 for the proposed widening area from 55 MPH to 45 MPH, due to the change in the nature of the roadway environment with this development (subject to approval by NCDOT).
5. Acquire and dedicate additional right-of-way as necessary to construct all required off-site roadway improvements.

NC 751 and I-40 Westbound Ramps

6. Construct an additional westbound right-turn lane with adequate storage and taper

NC 751 and I-40 Eastbound Ramps

7. Restripe southbound approach to provide dual left-turn lanes with adequate storage and taper.
8. Widen the I-40 eastbound on-ramp to accommodate a second receiving lane, tapering back to a single lane prior to its merge with I-40 Eastbound.
9. Extend the outer eastbound right-turn lane to provide adequate storage and taper.

NC 751 and Renaissance Parkway

10. Extend the existing southbound through lane as a second through lane south of the intersection with adequate storage and appropriate tapers.

NC 751 and Massey Chapel Road

11. Construct a westbound right-turn lane with adequate storage and taper.

NC 751 and Stagecoach Road

12. Widen NC 751 to provide two through lanes and a bicycle lane in each direction. The additional lanes must extend north of the intersection to provide adequate storage and tapers.
13. Construct a northbound left-turn lane with adequate storage and taper.

Stagecoach Road and Farrington Road

14. Construct a westbound right-turn lane with adequate storage and taper.
15. Construct a northbound right-turn lane with adequate storage and taper.

NC 751 and Student Place/Site Access #2

16. Widen NC 751 to provide two through lanes and a bicycle lane in each direction.
17. Construct a southbound right-turn lane with adequate storage and taper.
18. Construct a northbound left-turn lane with adequate storage and taper.
19. Construct Site Access #2 to accommodate one ingress lane and three egress lanes allowing for dual left-turn lanes and a shared through/right-turn lane.

NC 751 and Higher Learning Drive

20. Widen NC 751 to provide two through lanes and a bicycle lane in each direction.

NC 751 and Site Access #3

21. Widen NC 751 to provide two through lanes and a bicycle lane in each direction.
22. Construct a southbound right-turn lane with adequate storage and taper.
23. Construct a northbound left-turn lane with adequate storage and taper.
24. Construct Site Access #3 to accommodate one ingress lane and three egress lanes allowing for a dual left-turn lane and an exclusive right-turn lane.

NC 751 and Fayetteville Road/Site Access #4

25. Widen NC 751 to provide two through lanes and a bicycle lane in each direction.
26. Construct a southbound right-turn lane with adequate storage and taper.
27. Construct a northbound left-turn lane with adequate storage and taper.

28. Construct a northbound right-turn lane with adequate storage and taper.
29. Construct dual westbound left-turn lanes with adequate storage and taper.
30. Construct a westbound right-turn lane with adequate storage and taper.
31. Construct site access #4 to accommodate one ingress lane and four egress lanes allowing for dual left-turn lanes, a through lane, and exclusive right-turn lane.

NC 751 and Site Access #5

32. Widen NC 751 to provide two through lanes and a bicycle lane in each direction. The additional lanes must extend south of the intersection to provide adequate storage and tapers.
33. Construct a southbound right-turn lane with adequate storage and taper.
34. Construct a Site Access #5 with appropriate channelization and signage to restrict movements to right-in/right-out.

NC 751 and O'Kelly Chapel Road

35. Construct a westbound right-turn lane with adequate storage and taper.
36. Construct a southbound left-turn lane with adequate storage and taper.

Fayetteville Road and Massey Chapel Road (North)

37. Construct a westbound right-turn lane with adequate storage and taper.
38. Construct a northbound right-turn lane with adequate storage and taper.
39. Signalize this intersection when warranted and coordinate with Massey Chapel Road South intersection.

Fayetteville Road and Massey Chapel Road (South)

40. Construct an eastbound right-turn lane with adequate storage and taper.
41. Signalize this intersection when warranted and coordinate with Massey Chapel Road North intersection.

Fayetteville Road and Scott King Road

42. Construct a southbound left-turn lane with adequate storage and taper.
43. Construct a westbound right-turn lane with adequate storage and taper.
44. Construct a northbound right-turn lane with adequate storage and taper.

Barbee Road and Grandale Drive

45. Construct a northbound right-turn lane with adequate storage and taper.

NC 751 and Chancellor's Ridge Drive

46. Widen NC 751 to provide two through lanes and a bicycle land in each direction.

A phasing plan has been submitted with this request as a requirement of the MU district. A phasing plan identifies the timing and sequencing of the development plan components as well as the project's impact on various community services. A change in the Phasing Plan is considered a significant deviation from the development plan, UDO Sec. 3.5.12.A.7.

The committed phasing plan on sheet DP-2.1 of the development plan (see Attachment #5) identifies a range of 750 – 1,000 residential units and 150,000 – 500,000 square feet of non-residential space in the first phase. Additionally, sheet DP-2.1 graphically depicts other named phase areas that commit to a location and range of land uses within block elements, but not their timing. As submitted, this meets the minimum phasing plan requirements of the ordinance.

The development plan meets policy and technical standards of Durham’s adopted plans and ordinance. However, staff has a number of remaining concerns including lack of transit at the proposed development site, water quality impacts, utility system impacts, and impacts of the proposed site density on the area (see Section C, D, and E below for details).

B. Site History

The present zoning of PDR 0.220 was established with the approval of case #P02-79 by the Board of County Commissioners on May 12, 2003. The associated development plan shows the layout of 37 residential lots, an internal road network including two access points (one on NC 751 Highway and one stubbing to the south), and total impervious surface area of 9% (14.83 acres). No binding commitments beyond the considerations of UDO Sec. 3.5.12, Deviations from Approved Development Plans, were identified.

The boundary of the Watershed Protection Overlay F/J-A and F/J-B districts affecting this site was changed by administrative determination in 2006.

C. Area Characteristics

This site is located in the Suburban and Rural Development Tiers opposite the southern terminus of Fayetteville Road, on the west side of NC 751 Highway (see Attachment #1).

This area, south of Interstate 40 between NC 751 Highway and Fayetteville Road has experienced development pressure over the last 15 years including large commercial and residential projects such as The Streets at Southpoint, Renaissance Village, Renaissance Center, Southpoint Terrace, Eagle View, Chancellor’s Ridge, Chelsea Meadows, and the Hills at Southpoint. Despite these developments, however, overall density in the vicinity is low and much lower on average than the proposed development.

The site is more immediately surrounded by single-and multi-family residential uses, vacant land, and essentially bounded on the west by 100-year floodplain associated with New Hope Creek, a tributary to Jordan Lake. The zoning districts in the area include RR and PDR 2.650.

Adjoining Uses, Zoning Districts and Overlays			
	Existing Uses	Zoning Districts	Overlays
North	Vacant	RR	F/J-A
East	Multi- and single-family residential, vacant	PDR 2.650, RR	F/J-B
South	Single-family residential, vacant	RR	F/J-B
West	Vacant	RR	F/J-A

The *Long Range Bicycle Plan*, Map 4.6, shows a proposed bicycle lane along NC 751 Highway and a proposed greenway that follows Eagle Spur Trail, an abandoned railroad corridor to the west of the site and within the floodplain. Proposed bicycle lane segments were identified as such for their “ability to provide connectivity, serve underserved areas, improve safety in areas of concern, and address public input” (*Durham Comprehensive Bicycle Transportation Plan*, Executive Summary).

The *Durham County Inventory of Important Natural Areas, Plants, and Wildlife* shows a portion of the 751 Assemblage development tract within the Stagecoach Road Bottomlands Inventory site (see Attachment #4). The Stagecoach Road Bottomlands Inventory site is located primarily within the US Army Corps of Engineers lands managed for hunting by the NC Wildlife Resources Commission. The Corps land was preserved to mitigate loss of habitat for areas flooded by the creation of Jordan Lake.

The entire area of Corps land adjacent to the 751 Assemblage tract is designated by the NC Natural Heritage Program (NHP) as being of State significance. The Inventory site consists of a swamp forest associated with seasonally flooded land around New Hope Creek. It also includes the adjacent forested slopes to the east and west of the floodplain. The site features “...one of the most mature stands of true swamp forest remaining in the Piedmont” (*Inventory*, pgs. 111-114, see Attachment #15). Trees in the area are among the oldest in the Piedmont; trunk diameters of two to three feet are common. “[M]ost of the hardwoods are over 100 years old and many are probably older than 150 years.” The Inventory Site also includes privately owned slopes adjacent to the floodplain. The Inventory notes that in certain areas, the slopes “are becoming developed right down to the boundary of the Corps lands.”

The NHP regularly updates the data upon which the *Inventory* is based. The NHP, using somewhat different terminology, now identifies this site as the New Hope Creek Floodplain Forest and Slopes Significant Natural Heritage Area (SNHA). SNHA’s are sites around the state, both terrestrial and aquatic, that are of special biodiversity significance. A site’s significance may be due to the presence of rare species, exemplary or unique natural communities, or other important ecological features.

The NHP has recently updated the boundary of this Inventory site to include mature, high quality forests and a 100-yard wide strip of uplands surrounding the limits of the 100 year floodplain mapped by the North Carolina Flood Mapping

Program in 2007. However, the boundaries of the Inventory site are not precise. The metadata that accompanies the Heritage Program's digital information explains:

...The areas identified represent the approximate boundaries of ecologically significant sites. These boundaries come from a variety of sources, which vary in the quality of their locational information. Because of uncertainty about the precision and accuracy of the source data, sites within several kilometers of a project should be regarded as indicating the need for more information. The effects of a project on a SNHA depend on the nature of the species or community it contains and on the nature of the action being considered. Interpretation of potential effects should be done only by ecologists familiar with the site using the best locational information available.

This qualifier suggests that in order to fully understand potential effects of new development on an inventory site, a thorough analysis of the situation, performed by a qualified ecologist, is in order.

In reviewing the proposed development the Durham Open Space and Trails Commission (DOST) and the staff noted the presence of an Inventory site. In response, the applicant hired a consultant, Soil and Environmental Consultants, PA (S&EC) to assess the 751 Assemblage tract.

In December 2009, S&EC conducted a botanical species and habitat survey (see Attachment 13). The applicant's agent has verbally represented that this survey included an investigation of several target species noted in the *Inventory*, including Climbing Fern (*Lygodium palmatum*), Hairy Sweet Shrub (*Calycanthus floridus*), Southern Rein Orchid (*Platanthera flava*), Green Hawthorn (*Crataegus viridis*), and Pteridophytes (ferns and their allies). Planning staff has not been able to independently verify that these species were surveyed. These species were noted in the Inventory description of the New Hope Levee Forest in this area, although their presence being possibly/previously identified in gully areas south of Stage Coach Road that will be protected by stream buffers on the project site. S&EC concludes that, after evaluating available site data and performing habitat and species surveys, "...It is highly unlikely that any of the target species exist within any portion of the 751 assemblage site that will be directly impacted by development." S&EC indicated in its report dated January 13, 2010 (see Attachment #13) that, "The Stagecoach Road Bottomlands Inventory site does not include the Piedmont/Mountain Bottomland Forest Natural Community nor is it a pristine or unique example of any other community." The Planning staff received the consultant's report on January 13, 2010.

On January 24, 2010, a visit to the 751 Assemblage development tract was conducted by Misty Buchanan and Dr. Steve Hall from the NHP. Also present were David Gainey from S&EC; Kevin Hamak from Coulter, Jewell, Thames; and Helen Youngblood, Amy Wolff, and Scott Whiteman from the Durham City-County Planning Department. The purpose of the site visit was for the NHP staff to verify the boundary of the Lower New Hope Creek Floodplain Forest and Slopes

State Natural Heritage Area (SNHA) (formerly known as the Stagecoach Road Bottomlands) and assess potential impacts from the proposed development. The NHP staff focused on the area nearest the lands owned by the Corps.

Ms. Buchanan reported the NHP findings in a letter to Durham on March 2, 2010 (see Attachment #14). She confirmed the presence of Piedmont Bottomland Forest and Dry-Mesic Oak-Hickory Forest natural communities within the Inventory site on the development tract. She indicates that the NHP staff searched for habitat that could support four-toed salamanders, a significant rare species that has been recorded farther upstream within the New Hope floodplain. No suitable habitat was discovered and it did not appear that the site has potential for supporting any of the other animal species the NHP tracks.

Ms. Buchanan indicates that one of NHP's main concerns with the proposed project is the possible reduction of the dry land buffer during flood events and its consequent impacts on the wildlife associated with the bottomland forest. She notes that a more accurate and up-to-date estimate of the 100-year floodplain boundary is available from the NC Floodplain Mapping Program. Ms. Buchanan indicates that the NHP recommends that a dry land buffer of 100 yards (300 feet) (the April 27, 2010 letter revises the originally suggested 100 meter buffer to 100 yards, see Attachment #16) around the 100-year floodplain be preserved as an important refuge for wildlife during flooding. She expresses concerns about cumulative impacts of development in the area.

As the boundary of the Army Corp of Engineers property around the Jordan lake area continues to be developed, there will be less and less refuge left for wildlife during flood events—either natural or manmade. Maintaining a dry land buffer along the entire boundary of the Jordan Lake area will, therefore, become increasingly important, as will the review of the combined impacts to that buffer.

Staff Analysis and Conclusion. Staff's analysis of impacts on the proposed project area is focused on three areas: density, impacts to the Inventory, and bicycle/pedestrian impacts. Infrastructure impacts will be addressed in Section F of this report (below).

Density

The proposed maximum project density 8.9 units per acre is significantly higher than the future land use recommendation found in the *Comprehensive Plan's* Future Land Use Map (FLUM) for this site of 2 dwelling units per acre or less.

It also conflicts with the general land use pattern prescribed by the FLUM for this area by the *Comprehensive Plan* and the adopted I-40/NC 54 Corridor Study, which shows a gradual decrease in density and intensity from I-40 going south.

However, policy 2.3.2e of the *Comprehensive Plan* clearly states that mixed use development should be encouraged in the Suburban Tier regardless of the future land use designation.

The policy does not provide any guidance for the location of mixed-use zoning. While there is conflicting policy guidance regarding this request (i.e.: the FLUM versus *Comprehensive Plan* policy 2.3.2.e, the adopted policies of the City and County appear to support it. Greater emphasis is given to the written text of the *Comprehensive Plan* than to the FLUM.

The location of a project of this scope and density at the edge of an urbanized area is contrary to many urban planning principles, due to the likelihood of this project inducing additional development at the urban fringe, in areas where governmental services are costly to provide and which are environmentally sensitive.

As noted above, the overall land use plan for Durham County is generally a series of concentric rings decreasing in intensity from downtown to the Rural Tier, with areas of more intense growth identified in the Compact Tiers and Suburban Transit Areas.

However, there are no gradations of density provided in the Suburban Tier or required in the UDO, and the maximum density permitted in the MU district in the UDO is 10.5 units per acre, regardless of where in the Suburban Tier the site is located.

If considered in a regional context, however, this proposal is within an area of historic high growth and market desirability. The subject site is in close proximity to the Research Triangle Park, Raleigh-Durham International Airport, Jordan Lake (which holds significant amenity value in addition to being a drinking water source), Chapel Hill, and exploding growth in western Cary and other locations in western Wake County.

While there is currently (May, 2010) significant vacant residential and retail development in southern Durham, over the medium-to-long term, significant growth pressures in the vicinity of this proposed project are all but assured. This is particularly true if infrastructure to support growth (especially water and sewer utilities) are not widely available in eastern and northern Durham County.

It is significant in staff's opinion, however, that encouraging medium-to-high density growth without transit service and outside of designated transit nodes could reduce demand for higher density development in designated transit nodes in the near-to-medium term, and increase impacts on infrastructure by continuing the pattern of car-reliant development.

The larger concern, in staff's opinion, is the ability for a large project like the one proposed in this application to create conditions that "drive" community-wide infrastructure investments to the urban fringe and away from core areas already planned for infrastructure improvements (e.g.: currently identified transit nodes).

Impacts to the Inventory

The Durham Comprehensive Plan, adopted in February 2005, includes in Chapter 7, Conservation and Environment Element, an objective and policies related to Inventory site protection:

Objective 7.1.6, Habitats and Rare Species Protection. Identify and protect sites that provide habitat for biologically significant plant and animal species and serve as critical corridors for animal movements.

Policy 7.1.6a., The Inventory. The City and County shall adopt and include by reference in the Durham Comprehensive Plan the “Durham County Inventory of Important Natural Areas, Plants and Wildlife” as a source of information about the location and importance of special places and species in Durham County...

Policy 7.1.6b., Development Review and the Inventory. The City-County Planning Department and other City and County Departments shall review development proposals in relation to the Inventory to preserve Inventory sites and encourage new developments to avoid the sites by using planned developments, cluster developments, conservation-by-design subdivisions, and other means.

In order to comply with this policy, applicants for zoning map change would need to identify the general location of the Inventory resource on the development tract, conduct more detailed review of the resource and potential impacts from development, and if warranted, propose development patterns that consider and prevent or minimize the impact.

For the 751 Assemblage development tract, the staff acknowledges efforts by the applicant to locate the boundaries of the Inventory site through the work of consultants and through participation in field visits with NHP staff. The NHP digital data metadata and the March 2, 2010 letter (see Attachment #14) from the State notes that the boundaries should not be considered hard-and-fast limits and that they should trigger further assessment by a qualified biologist. The NHP staff note that these areas merit special consideration as local governments make land use decisions.

As noted above, the NHP staff expressed concerns about the sufficiency of a dry-land buffer area between the 100-year floodplain and the project site for wildlife movement during flood events. NHP’s main concern (see Attachment #14) is that the proposed project may reduce the dry land buffer during flood events. This assessment is based on the encroachment of the upland buffer (offset 100-yards from the floodplain) on the subject property. The most current development plan at the time of the March 2nd letter showed development inside the upland buffer.

The applicant, in consultation with the State, has revised the previous development plan (see Attachment #5 for the current plan) and proffered additional commitments (see committed elements 11, 12, 16, and 17) to address NHP’s concerns. While the development plan still shows development inside the 100-yard buffer, NHP opines that the additional commitments provide “compensatory mitigation for areas which will be directly impacted” (see Attachment #16). In summary, the applicant is committing to an offset totaling 34.8 acres (undisturbed or deed restricted) plus 1.37 acres of a natural revegetation area.

Thus, the applicant has presented a development proposal that preserves the Inventory site in accordance with the responsibility imposed by *Durham Comprehensive Plan* Policy 7.1.6b, Development Review and the Inventory.

The staff believes that the applicant has fulfilled their responsibility for protecting the Inventory site as imposed by policies in the *Comprehensive Plan*.

Bicycle / Pedestrian Impacts

The plan is in conformance with the *Long Range Bicycle Plan* by committing to widening NC 751 Highway for the frontage of the site to include bike lanes (committed element #4) and also commits to a minimum of one pedestrian trail access stub to the adjacent USACOE property for connection to the Eagle Spur Trail (committed element #10).

D. Site Characteristics

This site is 166.8 acres at 9414 NC 751 Highway. Local inventory indicates that a portion of the site once contained the Bernard Tyree House (now demolished) and associated barn and farm buildings (that currently exist in a dilapidated state). The mostly undeveloped property is tree covered (see Attachment #3, Aerial Photograph); and is impacted by five intermittent stream sections and associated buffers. Two of these stream segments have regulated steep slopes and one segment has a riparian wetland. The northwest portion of the site is within the Stagecoach Road Bottomlands Natural Inventory Site as identified in Section C (above).

There are no other identified environmental or physical constraints on this site.

Code Requirements				
Resource Feature	Code Provision	Required	Proposed	Consistent
Tree Coverage (minimum)	8.3.1C	Suburban Tier: 15% of 39.0 residential acres, and 10% of 108.4 non-residential acres = 11.32 % (16.69 acres)	18.99% (28.0 acres)	Yes
		Rural Tier: 0% of 19.43 acres	66.91% (13 acres)	
		TOTAL = 11.32% or 16.69 acres	24.58% or 41.0 acres (committed)	
Impervious Surface* (maximum)	8.7.2B	F/J-B: 70%	55% (illustrative)	Yes
		F/J-A: 9%	9%	Yes
Stream Buffer (feet)	8.7.2E	100	100	Yes
Steep Slopes	8.8.3C	Areas clearly indicated on plan	0.61 acres shown	Yes
Wetlands	8.9.3C	Protection of areas < 1 acre	0.16 acres, therefore buffer not required by UDO	Yes

Staff Analysis and Conclusion. The proposed development plan meets the intensity standards of the MU and RR districts and the development plan shows

conceptual layout of the project and protection of environmentally sensitive areas in accordance with Article 8, Environmental Protection in the UDO, as identified in the above table. Some of the tree coverage areas shown are committed (committed element # 11) as “committed bottomlands offset area”. This commitment overlaps with areas that are required for protection by other provisions of the ordinance including stream buffers and steep slopes.

E. Requested Zoning District Characteristics

The **Mixed Use (MU)** district is established to provide innovative opportunities for an integration of diverse but compatible uses into a single development that is unified by design features. A development plan is required with a request for this district; which shows a conceptual representation of the proposed site that indicates how the ordinance standards could be met. Any significant change to the development plan would require a new zoning petition.

The **Rural Residential (RR)** district in the Rural Tier, watershed area, is established to provide for agricultural activities and residential development on lots of at least 3 acres. The regulations of this district are designed to discourage the development of urban services and to encourage the maintenance of an open and rural character. Only single-family detached dwellings and manufactured homes shall be permitted. While RR is a residential district, certain nonresidential uses such as day care facilities and places of worship may be sought through a special use permit or other limited provisions of the ordinance.

The Falls/Jordan District B (F/J-B) and Falls/Jordan District A (F/J-A) **Watershed Protection Overlays** are established to preserve the quality of the region's drinking water supplies through application of the development standards intended to protect the environment. In general, water supply protection will be accomplished by establishing and maintaining low intensity land use and development on land near the region's water supply rivers and reservoirs. Where high density development is desired, water supply protection will be accomplished through the use of engineered stormwater controls. The overall objective is to:

- Reduce the risk of pollution from stormwater running off of paved and other impervious surfaces; and
- Reduce the risk of discharges of hazardous and toxic materials into the natural drainage system tributary to drinking water supplies.

Zoning District Requirements - MU				
	Code Provision	Required	Proposed	Consistent
Uses	6.11.7.A	Residential <i>and</i> at least one of the following: public and civic, commercial, or office.	Residential and non-residential (committed)	Yes
Minimum Site Area (acres)	6.11.7.B.1	4	147.4	Yes
Use Area	6.11.7.B.2	No single use to occupy more than 60% of floor area	No single use to occupy more than 60% of floor area	Yes
Transitional Use Area (TUA)	6.11.7.C	Use and building scale to match adjacent property and no more than a one story (15 foot) height differential	Use and building scale to match adjacent property and no more than a one story (15 foot) height differential	Yes
Residential Density*	6.11.7.D	10.5 DU/Ac (1,547 units)	7.1 – 8.9 DU/Ac (1,040 – 1,300 units) (committed)	Yes
Nonresidential Intensity	6.11.7.E	Minimum floor area = 30% of parcel	Minimum floor area = 30% of parcel	Yes
Maximum Height (feet)	6.11.7.F	145 if shown	60 (committed)	Yes
Street Yards (feet)	6.11.7.G	25	25	Yes
Transitional Use Area	6.11.7.C	50 foot wide area along perimeter to reflect uses and height of adjacent property	50 foot wide area along perimeter to reflect uses and height of adjacent property	Yes
Open Space	6.11.7.H	10% (14.74 acres)	23.8% (35.04 acres) (illustrative)	Yes
Useable Open Space	7.2	33% of required open space (4.86 acres)	47% of required open space (7.00 acres)	Yes
Bus Shelter	6.11.7.N.1	n/a	n/a	n/a
Connectivity Ratio	13.1.6.B	Not less than 1.40	1.42	Yes

*Maximum residential based on meeting the requirements of Sec. 6.3.A, Maximum Residential Density, Suburban Tier, and 6.11.7.D.2a, Vertical Integration of Uses.

Zoning District Requirements – RR				
	Code Provision	Required	Proposed	Consistent
Maximum Density (DU/Ac)	6.2.1A	0.33	0.06	Yes
Open Space (% of gross area)	6.1.2A	0	69.5 (13.5 acres) (illustrative)	Yes
Minimum Lot area (acres)	6.2.1A	3	3	Yes
Minimum Lot Width (feet)	6.2.1A	200	300	Yes
Minimum Street Yard (feet)	6.2.1A	50	50	Yes
Minimum Side Yard (feet)	6.2.1A	25	25	Yes
Minimum Rear Yard (feet)	6.2.1A	50	50	Yes
Maximum Height (feet)	6.2.1A	35	35	Yes

Project Boundary Buffers – Section 9.4				
Cardinal Direction	Zone	Required Opacity	Proposed Opacity	Consistent
North	MU to RR	0.4/0.6	0.6	Yes
	RR to RR	0/0	0	Yes
East	MU to PDR 2.650 and RR	n/a (adjacent to right-of-way 60 feet or greater)	n/a	Yes
East (Element K)	MU to PDR 2.650	0.4/0.6	0.6	Yes
	MU to RR	0.4/0.6	0.4	Yes
South	MU to RR	0.4/0.6	0.6	Yes
	RR to RR	0/0	0	Yes
West	MU to RR	0.4/0.6	0.6	Yes
	RR to RR	0/0	0/0	yes

Staff Analysis and Conclusion. Consistent with the intensity and standards of the respective districts, this site can accommodate the type of development allowed by the MU and RR districts as identified on the development plan. The project commits to at least one vertically integrated mixed-use building (committed element #9); however, the phase of that building has not been identified.

A phasing plan is a requirement for a request for the MU district. The applicant's phasing plan (sheet DP-2.1 of the development plan) has been provided in text and graphic format of which all elements are considered committed. The applicant's phasing plan will not likely result in an appropriate mix of uses because the thresholds provided for mixing of uses are high. Furthermore, there is no

commitment for residential development prior to the first 500,000 square feet of non-residential development as the language indicates that the residential lots only need to be platted, not developed. Conversely, 750 residential units may be developed prior to any non-residential.

Staff finds that the high thresholds set by the applicant to trigger a required a mix of uses (noted above) will reduce the likelihood of a vibrant, mixed-use community. In other words, a project that exists for 5-10 years and develops up to 750 residential properties may not readily incorporate retail and civic uses.

F. Infrastructure Impacts

The impact of the requested change has been evaluated to suggest its potential impact on the transportation system, water and sewer systems, and schools. In each case, the impact of the change is evaluated based upon a change from the most intense development using the existing land use and zoning to the most intense use allowed under the request.

1. Road Impacts

NC 751 and Fayetteville Road are the major roads impacted by the proposed zoning change. There are no scheduled NCDOT or City roadway improvement projects in the area.

Road Impacts		
Affected Segments	NC 751	Fayetteville Road
Current Roadway Capacity (LOS D) (AADT)	16,400	14,600
Latest Traffic Volume (AADT)	8,300	6,400
Traffic Generated by Present Designation (average 24 hour)	417*	
Traffic Generated by Proposed Designation (average 24 hour)	30,089**	
Impact of Proposed Designation	29,672	

Source of LOS Capacity: FDOT Generalized Level of Service Volume Table 4-1 (2002)

NC 751: 2-lane undivided class I arterial with left-turn lanes

Fayetteville Road: 2-lane Major City/County roadway with left-turn lanes

Source of Latest Traffic Volume: 2007 NCDOT Traffic Count Map

*Assumption- (Max Use of Existing Zoning) – RR: 5 single-family dwellings; PDR 0.220: 32 single-family dwellings

** Assumption- (Max Use of Proposed Zoning) – 625 apartments, 122 single-family dwellings, 432 townhomes, 300,000 SF office, 55,000 SF supermarket, 98,000 SF shopping center, 147,000 SF specialty retail, 450 student public elementary school, and a 550 student public middle school.

2. Transit Impacts

Transit service is not currently provided within one-quarter mile of the site. The MU district requires construction of a bus shelter only if the project includes or is adjacent to an existing or previously identified transit line extension (Sec. 6.11.7.N1, Additional Requirements). The UDO does not require this site to provide a bus shelter. Staff believes that transit services would help induce the mix of uses the applicant is proposing and the lack of transit services will discourage this mix.

3. Utility Impacts

The site is not currently served by City water and sewer. An extension agreement from the City and voluntary annexation petition will be required.

4. Drainage/Stormwater Impacts

The plan as submitted conceptually meets the minimum ordinance standards for a zoning map change request. Final approval of the stormwater impact analysis will occur at the time of site plan approval.

5. School Impacts

The proposed request could generate a total of 274 students. This represents 262 more students than the estimated maximum student generation from the present zoning designation. The schools that would potentially serve this site are Creekside Elementary School, Githens Middle School, and Jordan High School.

School Impacts-System Totals			
	Elementary School	Middle School	High School
Current Building Capacity	16,273	7,795	9,859
Maximum Building Capacity (110% of Building Capacity)	17,900	8,575	10,845
20th Day Attendance (2009-10 School Year)	16,055	6,530	9,844
Committed to Date (April 2007 – March 2010)	198	62	34
Available Capacity	1,647	2,918	967
Potential Students Generated – Current Zoning*	5	3	4
Potential Students Generated – Proposed Zoning**	159	59	56
Impact of Proposed Zoning	+154	+56	+52

*Assumption- (Max Use of Existing Zoning) – PDR 0.220: 37 single-family residential units

** Assumption- (Max Use of Proposed Zoning) – RR(D) and MU(D): 1,300 residential units

6. Water Supply Impacts

The proposed use associated with this zoning request is estimated to generate a demand for water of 209,500 gallons per day (GPD). This represents an increase of 203,920 GPD over the existing estimated water usage of the site.

Water Supply Impacts	
Current Water Supply Capacity	37.00 MGD
Present Usage	26.64 MGD
Approved Zoning Map Changes (April 2007 – March 2010)	1.18 MGD
Available Capacity	9.18 MGD
Estimated Water Demand Under Present Zoning	5,580 GPD
Potential Water Demand Under Proposed Zoning	209,500 GPD
Potential Impact of Zoning Map Change	+203,920 GPD
Notes: MGD = Million gallons per day	

*Assumption- (Max Use of Existing Zoning) –RR and PDR 0.220: 37 single-family units

** Assumption- (Max Use of Proposed Zoning) – RR and MU: 300,000 SF office, 300,000 SF commercial, 1,300 residential units

Staff Analysis and Conclusion. A Transportation Impact Analysis (TIA) was performed as a requirement of this request. The TIA identified a number of present transportation infrastructure insufficiencies that are being addressed through the committed elements identified as part of this development plan. These required improvements offset the projected increased capacity of this proposal; therefore satisfying *Comprehensive Plan* policy 8.1.2m, Transportation Level of Service.

The TIA identified deficiencies at both intersections for Massey Chapel Road and Fayetteville Road. The applicant committed to signaling both intersections which are closer together than typically allowed by NCDOT guidelines. However, NCDOT has approved this proposed traffic improvement.

New stormwater rules are under consideration for the Jordan Lake Watershed which will likely increase the required treatment of nitrogen and phosphorous resulting in more stringent stormwater BMP requirements. Other projects in the Jordan Lake Watershed have voluntarily proffered stormwater treatment to the projected new standards.

The intensity of non-residential development and the density of residential units proposed will require public sewer and water service. The majority of the site is within the Urban Growth Area (UGA). However, a utility extension agreement must be approved by City Council before sewer and water can be extended to this site. Staff believes that it is appropriate for those agreements to be in place before the time of zoning due to the currently unknown and potentially significant impact of utility extension to this area on City water and sewer infrastructure.

The City of Durham's Water Management Department has stated that it (the City) has the capacity to serve the quantities of water and sewer service that would be required of this proposed project at full build-out, but no statement has been provided by the City's Public Works Department regarding potential system impacts (e.g.: requirements regarding pipe sizing, water tanks, sewage pump stations, etc.), and thus impacts are unknown. (see Attachment #17).

G. Plan Consistency

Plan Requirements			
<i>Comprehensive Plan</i>	Policy	Requirement(s) (LOS = Level of Service)	Consistent
	Future Land Use Map	Very Low Density Residential (2 DU/Ac or less), Rural Density Residential (0.5 DU/Ac or less)	See 2.3.2e
	2.2.2b	Demand for Residential Land	Yes
	2.3.1a	Rural Tier Development Focus	Yes
	2.3.1b	Rural Tier Land Uses	Yes
	2.3.2a	Suburban Tier Development Focus	Yes
	2.3.2b	Suburban Tier Land Uses	Yes
	2.3.2e	Suburban Tier Mixed Use	Yes
	2.2.4a	Demand for Office Land	Yes
	2.2.5a	Demand for Commercial Land	Yes
	2.2.5b	Spacing of Commercial Development	Yes
	7.1.6b	Development Review and the Inventory	Yes
	8.1.2m	Transportation LOS	Yes
	8.1.4b	Development Review and the Adopted Trails and Greenway Plan	Yes
	8.1.4d	Development Review and the Adopted Regional Bicycle Plans	Yes
	9.4.1a, c	Water Quantity and Quality LOS	Yes
	11.1.1a	School LOS	Yes
	11.2.2b	School Sites	Yes

Staff Analysis and Conclusion. The request is consistent with the *Comprehensive Plan*.

H. Notification

Staff certifies that newspaper advertisements, letters to property owners within 600 feet of the site and the posting of a zoning sign on the property has been carried out in accordance with Section 3.2.5 of the UDO. In addition, the following neighborhood organizations were mailed notices:

- Friends of Durham
- Inter-Neighborhood Council
- Fairfield Community Awareness Committee
- Jordan Lake Resource Management
- Downing Creek
- Unity in the Community for Progress
- Fayetteville Street Planning Group
- Partners Against Crime – District 4
- Northeast Creek Streamwatch

I. Recommendations

Staff recommends approval, based on consistency with the *Comprehensive Plan*, UDO and considering the information identified in this report.

Planning Commission recommends denial. The Planning Commission finds that the ordinance request is not consistent with the adopted *Comprehensive Plan*. The Commission believes the request is not reasonable nor in the public interest and recommends denial based on inadequate transportation infrastructure, inconsistency with neighboring land uses, concerns regarding impacts on the environment, and opposition from the community.

J. Summary of Planning Commission Minutes April 13, 2010 (Case Z0800003)

Request: PDR 0.220, RR to MU(D), RR(D)

Staff Recommendation: Denial. Ms. Wolff and Mr. Young presented the staff report.

Public Hearing: Chair Moffitt opened the public hearing. Three people spoke in favor and twelve spoke in opposition. Chair Moffitt closed the public hearing.

Commission Discussion: Commission discussion centered around stormwater impacts, transit availability, the Durham Inventory site, traffic impacts, and the appropriateness of the project's location.

Motion: Approval. (Mr. Brine, Ms. Brown 2nd)

Action: Motion failed, 1-11, with Mitchell-Allen, Beechwood, Brine, Brown, Davis, Edens, Jacobs, Monds, Moffitt, Smith and Womack voting no.

Findings: The Planning Commission finds that the ordinance request is not consistent with the adopted *Comprehensive Plan*. The Commission believes the request is not reasonable nor in the public interest and recommends denial based on inadequate transportation infrastructure, inconsistency with neighboring land uses, concerns regarding impacts on the environment, and opposition from the community.

K. Staff Contact

Amy Wolff, Planner, 560-4137 x28235 or Amy.Wolff@durhamnc.gov.

L. Applicant Contact

Agent: Kevin Hamak, 919-682-0368, khamak@cjtpa.com.

M. Attachments

1. Context Map
2. Future Land Use Map
3. Aerial Photograph
4. Stagecoach Road Bottomlands Map
5. Development Plan Reduction

6. Owner's Acknowledgement Form
7. Application
8. Department of Transportation TIA Memorandum
9. NCDOT TIA Memorandum
10. DOST Memorandum
11. Bicycle and Pedestrian Advisory Commission Memorandum
12. UDO Section 3.5.12 (effective prior to March 2009)
13. Natural Community Analysis of the 751 Village Site (S&EC)
14. Lower New Hope Creek Floodplain Forest and Slopes (NHP/DENR) 3/2/2010
15. Stagecoach Road Bottomlands excerpt from *Durham County Inventory of Important Natural Area, Plants and Wildlife*
16. Lower New Hope Creek Floodplain Forest and Slopes (NHP/DENR) 4/27/2010
17. Email Correspondence "FW: Follow-up on 751 Project" dated April 23, 2010
18. Planning Commissioner's Written Comments
19. Ordinance Form